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LOUIS O. WILLIAMS
Chief Curator, Botany, Field Museum of Natural History
AND
ANTONIO MOLINA R.
Field Associate

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The Juglandaceae of Guatemala

LOUIS O. WILLIAMS
CHIEF CURATOR, BOTANY
FIELD MUSEUM OF NATURAL HISTORY
AND
ANTONIO MOLINA R.
FIELD ASSOCIATE

The Juglandaceae as treated in the "Flora of Guatemala" by Dr. Standley and Dr. Wayne E. Manning in 1952 was an unsatisfactory assemblage of plants with two of them known only from sterile material. There were thought to be four native species of the family in Guatemala—a fifth one was presumed to be the cultivated walnut, *Juglans regia* L. The four native species were distributed in three genera, *Alfaroa, Engelhardtia,* and *Juglans.* These genera we shall mention briefly in that order.

ALFAROA. Dr. Manning prepared the manuscript for *Alfaroa.* Much sterile material was determined as *A. costaricensis* Standl. by Dr. Manning. Standley had made the original determinations of much of this material. In all of the material available from Guatemala not a single fruiting or flowering specimen is known. In the discussion of this plant Dr. Manning says "The status of the Guatemalan tree referred here is somewhat uncertain because so far only sterile collections have been made." Again he says "It is possible that the Guatemalan tree is actually a species of *Engelhardtia. . . .*" Still again "It is to be expected that the Guatemalan tree represents a distinct species. . . ." To the best of our knowledge no material of this plant (or plants?) has been collected that will clarify the generic or the specific status of it—or, in fact, indicate whether one or two species are involved. We presume that the plant is not *A. costaricensis* but we have no guess what it may be, even that it is an *Alfaroa.*

The genus *Alfaroa* was described by Standley in 1927. When Manning wrote the account of it for the "Flora of Guatemala" in 1952 the original species, *A. costaricensis,* was the only one known. Exploration of the Mexican and Central American forests since that date has resulted in the recognition of four additional species—

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A. hondurensis L. Wms., *A. manningii* León, *A. mexicana* D. E. Stone, and *A. williamsii* A. Molina. We transfer *Engelhardtia guatemalensis* Standl. to *Alfaroa* below, making a total of six species now recognized.

Alfaroa guatemalensis (Standl.) Williams & Molina, comb. nov. *Engelhardtia guatemalensis* Standl. Field Mus. Bot. 22: 12. 1940.

This species was described from a sterile specimen that came from the swamps near Tactic, Alta Verapaz. We have collected it from the same locality and have it with fruits (*Williams et al., 40693*). The fruits indicate that the plant is an *Alfaroa*, related to *A. hondurensis* L. Wms. Standley prepared the account of *Engelhardtia guatemalensis* in the "Flora." A statement in the discussion is of interest: "When fruiting material of *Engelhardtia* and the tree here referred to *Alfaroa*[1] has been collected in ample quantity, it is possible that some surprising results may be obtained." Our field work early in 1969, when we made a special attempt to get these Juglandaceous plants, has confirmed the "surprising results" so far as this plant is concerned.

Standley states that *E. guatemalensis* is abundant in Alta Verapaz then goes on to tell about the resemblance of the plant to *amché* which is *Rhus striata*, and a particularly virulent member of that genus, and to say that the *Engelhardtia* was a conspicuous and abundant tree. In January of 1969 we searched the forests of Alta and Baja Verapaz but found the plant in only one place, and that the same place where Standley had collected the type many years before. We are curious as to what has happened in the interval since the type was collected and when we recollected the species. We suspect that Standley perhaps confused this tree, which proves to be an *Alfaroa*, with something else but we do not know what for we saw nothing similar in the forest except *Rhus striata* and Standley was well aware of that.

ENGELHARDTIA. The genus *Engelhardtia* is deleted from the "Flora of Guatemala," and the single species is transferred above to *Alfaroa*.

JUGLANS. The account of *Juglans* in the "Flora of Guatemala" was prepared by Dr. Manning and in it he described two new species of *Juglans*, *J. guatemalensis* and *J. steyermarkii*, and included the common walnut, *J. regia* L., as a cultigen.

[1] Which we have mentioned above.

Juglans guatemalensis Manning (Fieldiana, Bot. 24, pt. 3: 356. 1952) has proven to be indistinguishable from *Juglans olanchana* Standl. & L. Wms. (Ceiba 1: 76. 1950) originally described from Honduras. It is an exceedingly common tree in the region of Alta and Baja Verapaz and must have been more abundant years ago. Some of the beams in the hotel "La Posada," which was built about 40 years ago, were being replaced because of termite action while we were there. These proved to be walnut wood and probably of the species still common in the region. Some of the finest and largest trees that we saw were in a small park back of the municipal building in Cobán. We estimated these to be at least 25–30 meters tall.

A curious aspect of this walnut is that the Quecchí Indians of Alta Verapaz do not have a word for it, a most unusual situation since most all useful plants have well established names in Quecchí. The common word used is *nogal*, the Spanish generic word for walnut trees.

Juglans steyermarkii Manning (l.c. 358) is known only from the type. The species seems to be amply distinct.

Juglans regia L. We have not seen the English Walnut in Guatemala. Dr. Manning comments that the single sterile specimen that he saw is not typical and perhaps represents a hybrid.

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